5,852,812). Additionally, the Examiner rejected independent claim 69 and its respective dependent claims 70-73 as being unpatentable over Wood et al. in view of Reeder and Official Notice. Lastly, the Examiner rejected independent claim 74 and its respective dependent claims 75-78 as being unpatentable over Wood et al. in light of Official Notice. Applicants traverse the rejections and will address each in turn.

The burden of establishing a prima facie case of obviousness falls on the Examiner. Ex parte Wolters and Kuypers, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a prima facie case, the Examiner must not only show that the combination includes all of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. Ex parte Clapp, 227 U.S.P.Q. 972 (B.P.A.I. 1985).

2. First Rejection Under 35 U.S.C. § 103; Independent Claim 59 and the Claims Depending Therefrom

As stated above, the Examiner rejected independent claim 59 and its respective dependent claims 60-64 and 66-68 under 35 U.S.C. § 103(a) as being unpatentable over Wood et al. (U.S. Pat. No. 5,891,035) in view of Reeder (U.S. Pat. No. 5,852,812). Applicants respectfully traverse the rejection.

Applicants respectfully assert the pending claims are patentable for at least three reasons. First, the cited reference combination fails to teach *all* of the features recited in the instant claims. Secondly, the Reeder reference is non-analogous prior art and, as such, inapplicable, for the purposes of an obviousness rejection, against the instant application. Thirdly, the cited references lack a motivation to combine and, at best, the

Examiner is employing impermissible hindsight reconstruction to find such motivation to combine the references.

A. The Cited Reference Combination Fails to Disclose ALL of the Features Recited in the Instant Claims

Independent claim 59 recites, *inter alia*, "displaying user viewable indicia descriptive of the protocol at a medical diagnostic location, wherein the user viewable indicia include an exemplary image obtainable via the protocol." The cited references, taken alone or in combination, do not disclose this feature.

As support for disclosure of this feature, the Examiner cites column 2, lines 8-19 and 30-49; and column 7, line 1 through column 8, line 4 of the Wood et al. reference. *See* Paper No. 9, page 4. Additionally, in responding to the Applicants' previous arguments, the Examiner cited to column 10 of the Wood et al. reference. *See id.*, page 14. Applicants respectfully disagree with the Examiner's interpretation of the claim as well as the Wood et al. reference.

The mere fact that a reference relates to or teaches the use of images is not sufficient evidence to assume such reference teaches the use of images as recited in the instant claim. In other words, for a valid obviousness rejection, the reference or references must teach, at a minimum, that the viewable indicia include an exemplary image obtainable via the protocol. The cited sections of the Wood et al. reference are absolutely devoid of any such teaching.

The Wood et al. reference, in the cited passages, discusses the ability of an ultrasound system to communicate and access data from a network. *See* Wood et al., column 2, lines 30-49. Particularly, the Wood et al. reference states:

An ultrasonographer who uses numerous ultrasound machines at different locations can store his or her preferred

system presets in a file on the ultrasound system or network server, which can then be referenced...

See Wood et al., column 7, lines 20-23. Even assuming, arguendo, that the system presets discussed above are in any way analogous to the protocol recited by the instant claims, the Wood et al. reference would still fail to teach, "displaying user viewable indicia descriptive of the protocol at a medical diagnostic location." In other words, there is no reason to believe that the Wood et al. reference teaches the existence of a relationship between the "system preset" and displaying any such indicia descriptive of the "presets".

As introduced above, the Examiner attempted to satisfy this deficiency by citing to column 10 of the Wood et al. reference. Specifically, the Examiner stated:

However, as may readily be verified from column 10 of Wood [sic] (and from Figure 2), Wood [sic] discloses a reference image library from which a user of an ultrasound system can pull down exemplary images via a network, so as to compare those exemplary images with patient images. The only deficiency of Wood [sic] in this regard is that Wood [sic] does not expressly state that the exemplary images are obtainable via the protocol which is stored on a machine readable medium, the protocol including at least one operating parameter for a medical diagnostic system (column 2, lines 8-19 and 30-49; column 7, lines 1-43). Wood's [sic] invention may involve precisely this, or may involve the exemplary images being obtained through other programs on Wood's [sic] ultrasound machine, and then used in conjunction with downloaded presets (protocols) which Wood [sic] discloses. Applicant [sic] writes, 'These images are used to aid in making diagnoses, not for displaying images obtainable via the protocol.' Examiner responds that these images are used to aid in making diagnoses, precisely by displaying images similar to those obtained by the protocol (column 10).

See id., pages 13-14. Applicants again respectfully assert that the Examiner has misinterpreted the Wood et al. reference.

Clearly the cited passages in column 10 relate to reference images for the purposes of diagnostic treatment. See Wood et al., column 10, lines 39-42. Indeed, the reference images and reference library discussed in column 10 of the Wood et al. reference, "[are] then used as a comparative image[s] to aid in making a diagnosis from images obtained by the ultrasound system." See Wood et al., column 10, lines 39-41 (emphasis added). The reference images of Wood et al. do not in any way present a user with protocol options that could support any subsequent transaction based upon the protocols.

For example, the Wood et al. reference teaches that the system operator may obtain an image, such as an "obstetrical-fetal-head-trimester 3" from the image library 400. See Wood et al., column 10, lines 5-12. The operator subsequently employs the reference image from the library to "aid in making a diagnosis of the patient's condition." See id., lines 19-22 (emphasis added). No mention is made of the reference image being associated with protocol. Thus, the images are solely used for determining what is physically wrong with the patient. In other words, the doctor would view the patient's image in direct comparison with a downloaded image to determine what the patient's physiological condition may be. See id., lines 12-22. The images taught by Wood et al. are merely patient diagnostic tools (i.e. an exemplary image of a cancerous cell) and are not related to the operation of the ultrasound device by any means whatsoever.

In the Wood et al. reference, the parameters used to obtain the image would be irrelevant in comparison to the physiological content therein. The term "reference image," as applied by Wood et al., relates to the biological or physiological content within the image and not to the protocol used to obtain such image. The training discussed by Wood et al. suggests the training of one who is new in viewing the images, i.e. a new doctor or nurse. Accordingly, there is no reason to believe that images of Wood et al. may be employed with respect to the parameters (alleged protocols) of the

ultrasound system. Indeed, the Examiner own use of the term "may" in the Office Action supports Applicants' contention regarding the Examiner's use of assumption. See Paper No. 9, page 14, lines 5-8. The reader of Wood et al. might as readily conclude that the reference image was obtained by an entirely different protocol, as no "settings" at all are disclosed as being associated with that image.

Additionally, independent claim 59 recites, "performing a protocol exchange transaction... and storing an accounting record of the transaction." The Examiner relies on the Reeder reference as disclosing this feature. However, Applicants respectfully assert that the Reeder reference does not cure the deficiencies of the Wood et al. reference. The Reeder reference is directed to an online billing system for exchanging international currency from credit card transactions. *See* Reeder, column 2, lines 36-44. In fact, the reference does not disclose diagnostic systems or anything even remotely related to the medical field. The reference, at best, discloses a billing system, and does not even mention a *protocol*, much less "an exemplary image obtainable via a protocol." Indeed, the Examiner appears to assume that any electronic accounting system is anticipatory and, as such, is reading out a number of recitations of the instant claim. As discussed further below, the Examiner is, at best, employing hindsight reconstruction to reach his conclusions. In light of the foregoing, Applicants respectfully assert that the Reeder reference fails to cure the deficiencies of the Wood et al. reference.

Because the cited references, taken alone or in combination, fail to disclose all of the features recited by the instant claims, Applicants respectfully assert that independent claim 59 and the claims which depend therefrom are patentable. Reconsideration and allowance are respectfully requested.

B. The Reeder Reference is Non-Analogous Prior Art

Furthermore, because the Reeder reference is non-analogous art, it is not a proper basis for the rejection. For the teachings of a reference to be prior art under

35 U.S.C. § 103, there must be some basis for concluding that the reference would have been considered by one skilled in the particular art working on the particular problem with which the invention pertains. In re Horne, 203 U.S.P.Q. 969, 971 (C.C.P.A. 1979). Non-analogous art cannot properly be pertinent prior art under 35 U.S.C. § 103. In re Pagliaro, 210 U.S.P.Q. 888, 892 (C.C.P.A. 1981). The determination of whether a reference is from a non-analogous art is set forth in a two-step test given in Union Carbide Corp. v. American Can Co., 724 F.2d 1567, 220 U.S.P.O. 584 (Fed. Cir. 1984). In *Union Carbide*, the court found that the first determination was whether "the reference is within the field of the inventor's endeavor." If it is not, one must proceed to the second step "to determine whether the reference is reasonably pertinent to the particular problem with which the inventor was involved." In regard to the second step, Bott v. Fourstar Corp., 218 U.S.P.Q. 358 (E.D. Mich. 1983) determined that "analogous art is that field of art which a person of ordinary skill in the art would have been apt to refer in attempting to solve the problem solved by a proposed invention." "To be relevant, the area of art should be where one of ordinary skill in the art would be aware that similar problems exist." Id.

In the Office Action, the Examiner concedes that the Reeder reference is not in the same field of endeavor as the present claims. *See* Paper No. 9, pages 14-15. Thus, only the second prong of the *Union Carbide* test remains in contention. With reference to this prong, the Examiner stated, "Reeder is not, contrary to Applicant's [sic] contention, merely directed to an online billing system for exchanging international currency from credit card transactions, but, in Reeder's own words, a billing system for on-line computer networks, where billable events can include access to premium services, file downloads, or gateway connections to other systems (Abstract)." *See id.*, pages 14-15. Moreover, the Examiner indicated that the pertinent problem to be solved is, "a desire to be paid." *See id.*

That fundamental desire of humans in a market economy is simply not enough. As stated above, the *Union Carbide* test requires that appropriate art, if not in the same field of endeavor, must still be *reasonably* pertinent to the particular problem with which the inventor was involved. Thus, the mere fact that the Examiner provides a possible link between the two references is not sufficient to support a contention that the two references are reasonably pertinent to one other. Indeed, Applicants respectfully assert that a "desire to be paid," as defined by the Reeder reference, is not sufficiently related to problems with respect to medical systems or access to imaging protocols as recited in the instant claims. Although many may have a desire to be paid, that is not reason as to why as skilled artisan would look to a billing system for software catalogs when designing a medical imaging protocol distribution system. As discussed further below, the Examiner is at best using hindsight reconstruction to reach his conclusions.

Based upon the foregoing, Applicants respectfully assert that the Reeder reference is non-analogous prior art and, as such, is inapplicable against the instant application with respect to an obviousness rejection. Reconsideration and allowance are respectfully requested.

C. The Cited References Lack the Necessary Motivation to Combine

Additionally, the Examiner has failed to present a convincing line of reasoning to support a suggestion or motivation to combine or to modify the Wood et al. reference or the Reeder reference in light of one another. Indeed, the Examiner has failed to meet the required burden of articulating a motivation for combining the Wood et al. and Reeder references. In the Office Action, the Examiner stated:

Hence, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention for the user viewable indicia to include an exemplary image obtainable via the protocol, for the stated advantages of aid [sic] in making a diagnosis from images obtained by the diagnostic system, and training new

diagnostic system users, and for the obvious advantage of demonstrating what the protocol can do.

See Paper No. 9, pages 4-5. The Examiner's statement is nothing more than an unsupported assertion regarding the teachings of Wood et al. and Reeder, and fails to articulate a convincing line of reasoning as to why one of ordinary skill in the art would combine the references.

In the present case, the Examiner's unsupported assertion does not meet the evidentiary standard required for combining references under § 103. Indeed, of the Examiner's proposed benefits, two may flow from Wood et al., while the third is entirely unsupported by either reference.

The Wood et al. reference is directed to providing an ultrasound diagnostic imaging system with communication capability. *See* Wood et al., column 2, lines 30-33. Indeed, the communications disclosed by Wood et al. relate to patient diagnostic and system presets. *See id.*, column 7, lines 20-27, and column 10, lines 19-22. The system presets simply allow an ultrasonographer to use the same preferred system presets, while the patient diagnostic images relate pathologies and conditions for patient diagnosis. *See* Wood et al., column 7, lines 20-22, and column 10, lines 12-15. The Reeder reference is directed to an online billing system for exchanging international currency from credit card transactions. *See* Reeder, column 2, lines 36-44. The billing system resolves problems relating to pricing and billing international customers in local currency from a single credit card processor. *See* Reeder, column 2, lines 16-26. Undeniably, the Reeder reference does not disclose diagnostic systems or anything remotely related to the medical industry. In the rejection, the Examiner has not pointed to any suggestion in the references or in any other art of record for a suggestion or a motivation to combine these references. Thus, as the references are unrelated and do not provide support for the proposed combination, the

Examiner's rejection as based on the proposed combination is unsupported and cannot stand.

At best, the Examiner is employing impermissible hindsight reconstruction to reach the instant claims. When prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

In other words, the artisan, viewing only the collective teachings of the references, must find it obvious to selectively pick and choose various elements and/or concepts from the cited references to arrive at the claimed invention. See Ex parte Clapp, 227 U.S.P.Q. 972 (B.P.A.I 1985). Moreover, the Federal Circuit has warned that the Examiner must not, "fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher." In re Dembiczak, F.3d 994, 999, 50 U.S.P.Q.2d 52 (Fed. Cir. 1999) (quoting W.L. Gore & Assoc., Inc. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983)). Avoiding hindsight reconstruction is especially important regarding less technologically complex inventions, where the very ease with which the invention can be understood may prompt one employ such hindsight. See id.

Accordingly, Applicants respectfully assert that independent claim 59 and its respective dependent claim 60-64 and 66-68 are patentable over the cited references, taken alone or in combination. Reconsideration and allowance are respectfully requested.



3. Second Rejection Under 35 U.S.C. § 103; Independent Claim 69 and the Claims Depending Therefrom

As stated above, the Examiner rejected independent claim 69 and its dependent claims 70-73 under 35 U.S.C. § 103(a) as being unpatentable over Wood et al. in view of Reeder and Official Notice. Applicants, in a previous response, objected to the Examiner's use of Official Notice. In response, the Examiner, in the instant Office Action, presented the Wyatt reference (U.S. Pat. No. 6,041,411). Applicants respectfully traverse the rejection.

Applicants, here again, respectfully assert the pending claims are patentable for at least three reasons. First, the cited reference combination fails to teach all of the features recited in the instant claims. Secondly, the Reeder reference is non-analogous prior art and, as such, inapplicable against the instant application with respect to an obviousness rejection. Thirdly, the cited references lack a motivation to combine and, at best, the Examiner is employing impermissible hindsight reconstruction to combine the teachings of the references.

A. The Reference Combination Fails to Disclose ALL of the Features Recited in the Instant Claims

Independent claim 69, similar to claim 59, recites, *inter alia*, "selecting a desired protocol from the list, wherein the protocol list includes an exemplary image obtainable via the protocol." As discussed above, there is no reason to believe that the Wood et al. reference discloses this feature. In contrast to the instant claim, the images of the Wood et al. reference (i.e. the images in the image library and the images taught in column 10) are nothing more than patient diagnostic tools. Even following the Examiner's assumptions regarding the presets being analogous to the protocols of the instant claims, there is no reason to believe that the system operator would select a "preset" based on the any semblance of an exemplary image obtainable by the preset. Again, the mere fact that an

image may show what healthy or diseased tissue, for example, should look like does not tell as system operator what protocol (presets) to select to obtain a similar image.

Additionally, independent claim 69 recites, "performing a transaction by accessing data from a protocol library... and storing a record of the transaction." The Examiner again relies on the Reeder reference as disclosure for this feature. And Applicants again respectfully assert that the Reeder reference does not satisfy the deficiencies of the Wood et al. reference. As discussed above, the Reeder reference relates to a billing system and in no way even suggests a medical diagnostic system or a transaction related to protocols. By failing to present references which disclose all of the recited features of the instant claims, the Examiner has failed to present a *prima facie* obviousness rejection.

The Examiner, in this Office Action, also presents the Wyatt reference (U.S. Pat. No. 6,041,411). Regarding this reference, the Examiner stated, "this [viewing of lists of products or files that may be ordered, and selecting the desired item from the list] is supported by Wyatt ... column 4, lines 46-52; column 9, lines 29-46; and column 9, line 54 through column 10, line 5." See Paper No. 9, page 2. Even assuming, arguendo, that the Examiner's assertions regarding the teachings of Wyatt are correct, the Wyatt reference still fails to disclose a "protocol list [that] includes an exemplary image obtainable via the protocol." Indeed, the Wyatt reference teaches a catalog file for software products. See Wyatt, column 9, lines 60-66. Each of these products is identified by a SKU field 156, product name 158, a description of the product and the cost. See id., column 10, lines 1-4. There is no reason to believe an image of the product is provided. Thus, the Wyatt reference fails to disclose any semblance of a list, wherein the list provides exemplary images of what can be selected from the list or what is to be provided by the selections. Accordingly, Applicants maintain their objection to the Examiner's use of Official Notice.

Because the cited references, taken alone or in combination, fail to disclose all of the features recited by the instant claims, Applicants respectfully assert that independent claim

69 and the claims which depend therefrom are patentable. Reconsideration and allowance are respectfully requested.

B. Reeder reference is Non-Analogous Art

As stated above, the Reeder reference is non-analogous prior art. Again, the Reeder reference is directed to the problem of pricing and billing international customers at local currency from a single credit card processor. *See* Reeder, column 2, lines 16-26. Applicants respectfully assert that this problem is not reasonably pertinent to the problems of distribution of imaging protocols for medical diagnostic systems as recited in the instant application. Moreover, Applicants respectfully assert that the broad and general "desire to be paid" as suggested by the Examiner is not sufficient evidence to consider the Reeder reference and the instant application as being directed to the same or even similar problems.

C. The Cited References Lack the Motivation to Combine

As stated above, the conclusory statements regarding the "obviousness" in combining the Reeder and Wood et al. reference are not sufficient to support a *prima facie* case of obviousness. Moreover, Applicants respectfully assert that the Examiner is, at best, employing impermissible hindsight reconstruction in combining the cited references to reach the instant claims. Indeed, the Examiner must not look at the instant application and, subsequently, use the teachings therein to find the motivation for combining the cited references. Such is clearly impermissible hindsight reconstruction. Indeed, the Examiner must present motivation from the references taken as a whole to make the combination.

4. Third Rejection Under 35 U.S.C. § 103; Independent Claim 74 and the Claims Depending Therefrom

As stated above, the Examiner rejected independent claim 74 and its dependent claims 75-78 under 35 U.S.C. § 103(a) as being unpatentable over the Wood et al. reference Applicants respectfully traverse the rejection.

Applicants respectfully assert that the pending claims are patentable for at least two reasons. First, the cited reference combination fails to teach all of the features recited in the instant claims. Secondly, the Examiner has again taken Official Notice regarding what is "obvious" or well-known in the art.

A. The Cited Reference Fails to Disclose ALL of the Features Recited in the Instant Claims

Similar to claims 59 and 69, independent claim 74 recites, *inter alia*, "a messaging module in the diagnostic station or the institution for formulating messages containing data descriptive of a desired protocol, the descriptive data including an exemplary image obtainable via the protocol." As stated above, the images discussed in the Wood et al. reference relate to physiological conditions, and more particularly, are images employed for the purposes of patient diagnosis. Again, there is no reason to believe that the images taught by the Wood et al. reference are by any means employed to present exemplary images obtainable via a desired protocol as recited in the instant claim.

Moreover, the Examiner concedes that, "Wood [sic] does not expressly disclose that the protocol list includes an exemplary image obtainable via the protocol, but Wood [sic] does disclose exemplary images obtainable via the diagnostic system, and presumably via the protocol (column 9, line 67, through column 10, line 43)." See Paper No. 9, page 9, lines 10-11. The patient images of Wood et al. are not, however, the reference images to which the Examiner should refer. Those reference images are *not* associated with any imaging protocols or settings. However, the Examiner attempts to satisfy this deficiency by stating,

"...it would have been obvious to one of ordinary skill in the art at the time of applicant's [sic] invention for the protocol list to include an exemplary image obtainable via the protocol, for the stated advantages of aid [sic] in making a diagnosis from images obtained by the diagnostic system, and training new diagnostic system users, and for the obvious advantage of demonstrating what the protocol can do."

See id., lines 12-16.

As discussed above, there is no reason to believe the Wood et al. reference suggests showing any image for the purposes of demonstrating what a protocol can do. Rather, as fully discussed above, the images relate to what a person diagnosing the patient should be looking for. Indeed, how the image was made is wholly irrelevant in the Wood et al. reference as regards what the image shows.

B. The Examiner has Improperly Taken Official Notice

Additionally, Applicants respectfully assert that the Examiner has simply made a conclusory argument regarding what is "obvious" in the art. *See* Paper No. 9, lines 12-14. In essence the Examiner has again taken Official Notice regarding what is well-known in the art. Accordingly, Applicants again, in accordance with M.P.E.P. § 2144.03, maintain the challenge to the Examiner's use of Official Notice. Specifically, Applicants respectfully request that the Examiner produce evidence in support of the Examiner's position regarding what is "obvious."

Because the cited reference fails to disclose all of the features recited by the instant claims, Applicants respectfully assert that independent claim 74 and the claims which depend therefrom, claims 75-78, are patentable. Reconsideration and allowance are respectfully requested.

Conclusion

In view of the remarks and amendments set forth above, Applicants respectfully request allowance of the pending claims. If the Examiner believes that a

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telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Date: 6/2/2003

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